



## Introduction to HTML

### > Getting Started

#### > What an HTML Document Is

HTML documents are plain-text (also known as ASCII) files that can be created using any text editor (e.g., Emacs or vi on UNIX machines; SimpleText on a Macintosh; Notepad on a Windows machine). You can also use word-processing software if you remember to save your document as "text only with line breaks".

### > What makes up HTML?

#### > Tags Explained

An **element** is a fundamental component of the structure of a text document. Some examples of elements are heads, tables, paragraphs, and lists. Think of it this way: you use HTML tags to mark the elements of a file for your browser. Elements can contain plain text, other elements, or both.

To denote the various elements in an HTML document, you use **tags**. HTML tags consist of a left angle bracket (<), a tag name, and a right angle bracket (>). Tags are usually paired (e.g., <H1> and </H1>) to start and end the tag instruction. The end tag looks just like the start tag except a slash (/) precedes the text within the brackets.

Some elements may include an **attribute**, which is additional information that is included inside the start tag. For example, you can specify the alignment of images (top, middle, or bottom) by including the appropriate attribute with the image source HTML code.

- **NOTE:** *HTML is not case sensitive.* <title> is equivalent to <TITLE> or <TiTIE>.

Not all tags are supported by all World Wide Web browsers. If a browser does not support a tag, it will simply ignore it. Any text placed between a pair of unknown tags will still be displayed, however.

## > The Minimal HTML Document

Every HTML document should contain certain standard HTML tags. Each document consists of head and body text. The head contains the title, and the body contains the actual text that is made up of paragraphs, lists, and other elements. Browsers expect specific information because they are programmed according to HTML and SGML specifications.

Required elements are shown in this sample bare-bones document:

```
<html>
<head>
<TITLE>A Simple HTML Example</TITLE>
</head>
<body>
<H1>HTML is Easy To Learn</H1>
<P>Welcome to the world of HTML.
This is the first paragraph. While short it is
still a paragraph!</P>
<P>And this is the second paragraph.</P>
</body>
</html>
```

The required elements are the `<html>`, `<head>`, `<title>`, and `<body>` tags (and their corresponding end tags). Because you should include these tags in each file, you might want to create a template file with them. (Some browsers will format your HTML file correctly even if these tags are not included. But some browsers won't! So make sure to include them.)

## > Markup Tags

### > HTML

This element tells your browser that the file contains HTML-coded information. The file extension `.html` also indicates this as an HTML document and must be used. (If you are restricted to 8.3 filenames (e.g., `LeeHome.htm`), use only `.htm` for your extension.)

### > HEAD

The head element identifies the first part of your HTML-coded document that contains the title. The title is shown as part of your browser's window (see below).

### > TITLE

The title element contains your document title and identifies its content in a global context. The title is typically displayed in the title bar at the top of the browser window, but not inside the window itself. The title is also what is displayed on someone's hotlist or bookmark list, so choose something descriptive, unique, and relatively short. A title is also used to identify your page for search engines (such as [HotBot](#) or [Infoseek](#)).

For example, you might include a shortened title of a book along with the chapter contents: `NCSA Mosaic Guide (Windows): Installation`. This tells the software name, the platform, and the chapter contents, which is more useful than simply calling the document `Installation`. Generally you should keep your titles to 64 characters or fewer.

## > BODY

The second--and largest--part of your HTML document is the body, which contains the content of your document (displayed within the text area of your browser window). The tags explained below are used within the body of your HTML document.

## > Headings

HTML has six levels of headings, numbered 1 through 6, with 1 being the largest. Headings are typically displayed in larger and/or bolder fonts than normal body text. The first heading in each document should be tagged <H1>.

The syntax of the heading element is:

<H $y$ >*Text of heading* </H $y$ >

where  $y$  is a number between 1 and 6 specifying the level of the heading.

Do not skip levels of headings in your document. For example, don't start with a level-one heading (<H1>) and then next use a level-three (<H3>) heading.

## > Paragraphs

Unlike documents in most word processors, carriage returns in HTML files aren't significant. In fact, any amount of *whitespace* -- including spaces, linefeeds, and carriage returns -- are automatically compressed into a single space when your HTML document is displayed in a browser. So you don't have to worry about how long your lines of text are. Word wrapping can occur at any point in your source file without affecting how the page will be displayed.

In the bare-bones example shown in the Minimal HTML Document section, the first paragraph is coded as:

```
<P>Welcome to the world of HTML.
```

```
This is the first paragraph.
```

```
While short it is
```

```
still a paragraph!</P>
```

In the source file there is a line break between the sentences. A Web browser ignores this line break and starts a new paragraph only when it encounters another <P> tag.

- **Important:** You must indicate paragraphs with <P> elements. A browser ignores any indentations or blank lines in the source text. Without <P> elements, the document becomes one large paragraph. (One exception is text tagged as "preformatted," which is explained below.) For example, the following would produce identical output as the first bare-bones HTML example:

```
<H1>Level-one heading</H1>
```

```
<P>Welcome to the world of HTML. This is the
```

```
first paragraph. While short it is still a
```

```
paragraph! </P> <P>And this is the second paragraph.</P>
```

To preserve readability in HTML files, put headings on separate lines, use a blank line or two where it helps identify the start of a new section, and separate paragraphs with blank lines (in addition to the <P> tags). These extra spaces will help you when you edit your files (but your browser will ignore the extra spaces because it has its own set of rules on spacing that do not depend on the spaces you put in your source file).

- **NOTE:** The </P> closing tag may be omitted. This is because browsers understand that when they encounter a <P> tag, it means that the previous paragraph has ended. However, since HTML now allows certain attributes to be assigned to the <P> tag, it's generally a good idea to include it.

Using the <P> and </P> as a paragraph container means that you can centre a paragraph by including the ALIGN=*alignment* attribute in your source file.

```
<P ALIGN=CENTER>
```

This is a centred paragraph.

[See the formatted version below.]

```
</P>
```

## > Formatting Character TAGS

### > Font tags

: <FONT> ... </FONT>

With the addition of new attributes the **<FONT>** tag has become a very powerful tool for styling your Web page. This simple tag controls the font of the text.

### > COLOR

The **COLOR** attribute changes the color of the selected text. This attribute may not be supported on older browsers.

Syntax: **COLOR="#rrggbb"**

### > FACE

The **FACE** attribute will change the font for your text. This attribute may not be supported on older browsers. When entering the **FACE** value use lowercase lettering, capitalize the first letter, and separate words by commas. Some fonts may not be supported by some browsers.

Syntax: **FACE="fontname"**

### > SIZE

This attribute will change the size of your text. Absolute values range from 1 to 7, or you may enter values like "+1" or "-2" to adjust from the previous size.

Syntax: **SIZE="1"... "7", or "+/-integer"**

```
FONT SIZE=4>
```

```
<B>This is bold</B>
```

```
<I>This is italic</I>
```

```
<U>This is underlined</U>
```

```
text<SUP>superscript</SUP>
```

```
text<SUB>subscript</SUB>
```

```
<TT>This is teletype</TT>
```

```
</FONT>
```

**> Bold tags:**

`<B> ... </B>`

This tag will display the selected text as bold.

**> Italic tags:**

`<I> ... </I>`

This tag will display the selected text as italic.

**> Underline tags:**

`<U> ... </U>`

This tag will display the selected text as underlined.

**> Strikethrough tags:**

`<S> ... </S>`

This tag will display the selected text with a line through the words.

**> Superscript tags:**

`<SUP> ... </SUP>`

This tag will display the selected text in a smaller font and raised above the text line.

**> Subscript tags:**

`<SUB> ... </SUB>`

This tag will display the selected text in a smaller font and sunken below the text line.

Extracted from [NCSA--A Beginner's Guide to HTML Home Page](http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html),  
<http://archive.ncsa.uiuc.edu/General/Internet/WWW/HTMLPrimer.html> (*no longer active*)

**For alternative resources to learning HTML:**

- W3Schools: <http://www.w3schools.com/html/default.asp>
- HTML Goodies: <http://www.htmlgoodies.com/primers/html/>
- HTML Code Tutorial: <http://www.htmlcodetutorial.com/>